

What is claimed is:

1. Within a digital rendering device, a method of perfecting rendering parameters of a digital image as part of an image rendering process using face detection within said rendered image to achieve one or more desired image rendering parameters, comprising:
 - (a) determining default values of one or more image attributes of at least some portion of said digital image;
 - (b) determining the values of one or more digital-rendering-device rendering parameters;
 - (c) identifying a plurality of groups of pixels that correspond to an image of a face within the digitally-rendered image, and determining corresponding image attributes to said groups of pixels;
 - (d) comparing one or more default image attribute values with one or more rendered image attribute value based upon analysis of said image of said face; and
 - (e) adjusting said digital-rendering-device rendering parameters corresponding to adjusting said image attribute values.
2. The method of claim 1, each of the steps being performed within a digital-rendering-device.
3. The method of claim 1, each of the steps being performed within a driver to a digital-rendering-device.
4. The method of claim 1, the one or more parameters including overall exposure, relative exposure, orientation, color balance, color gamut, white point, tone reproduction, size, or sharpness, or combinations thereof.
5. The method of claim 1, the face pixels identifying step being automatically performed by an image processing apparatus, the method further comprising manually removing one or more of said plurality of groups of pixels that correspond to said image of said face.
6. A method of manually removing one or more detected faces as recited in claim 5, the method being performed in response to false detection of regions as faces.

7. A method of manually removing one or more detected faces as recited in claim 5, the method being performed in response to a determination to concentrate on less said image faces than faces identified in said identifying step.
8. A method of manually removing one or more detected faces as recited in claim 5, the method being performed by increasing a sensitivity level of said face identifying step.
9. A method of manually removing one or more detected faces as recited in claim 5, the method being performed by an interactive visual method.
10. An interactive visual method of manually removing one or more detected faces as recited in claim 9, the method being performed using a built-in display of said digital-rendering-device.
11. The method of claim 1, the face pixels identifying being automatically performed by an image processing apparatus, the method further comprising manually adding an indication of another face within the image.
12. The method of claim 1, the face pixels identifying being automatically performed by an image processing apparatus which receives a relative value as to a detection assurance.
13. The method of claim 1, the face pixels identifying being automatically performed by an image processing apparatus which receives a relative value as to an estimated importance of detected regions.
14. The method of claim 13, the face pixels identifying being automatically performed by an image processing apparatus, the method further comprising manually modifying said relative value as to an estimated importance of detected regions.

15. A method of digital image processing using face detection to achieve a desired image rendering parameter, comprising the steps of:

(a) identifying a group of pixels that correspond to an image of a face within a digitally-detected image;

(b) determining initial values of one or more parameters of at least some of the pixels;
and

(c) determining an initial rendering parameter of the digitally-detected image based on the initial values; and

(d) automatically adjusting values of the one or more parameters of pixels within the digitally-detected image based upon comparison of the initial rendering parameter with the desired rendering parameter.

16. The method of claim 15, the method being performed within one of a group of image rendering devices including a digital inkjet digital-rendering-device, a digital laser digital-rendering-device, a thermal digital-rendering-device, a digital display, a liquid crystal display, or a digital copier, or combinations thereof.

17. The method of claim 16, the one or more parameters including overall exposure, relative exposure, orientation, color balance, color gamut, white point, tone reproduction, size, or sharpness, or combinations thereof.

18. The method of claim 16, the face pixels identifying being automatically performed by an image processing apparatus, the method further comprising manually removing a false indication of another face within the image.

19. The method of claim 16, the face pixels identifying being automatically performed by an image processing apparatus, the method further comprising manually adding an indication of another face within the image.

20. The method of claim 15, the one or more parameters including overall exposure, relative exposure, orientation, color balance, color gamut white point, tone reproduction, size, or sharpness, or combinations thereof.

21. The method of claim 15, the face pixels identifying step being automatically performed by an image processing apparatus, the method further comprising manually removing a false indication of another face within the image.

22. The method of claim 15, the face pixels identifying step being automatically performed by an image processing apparatus, the method further comprising manually adding an indication of another face within the image.

23. Within a digital rendering device, one or more processor readable storage devices having processor readable code embodied thereon, said processor readable code for programming one or more processors to perform a method of perfecting rendering parameters of a digital image as part of an image rendering process using face detection within said rendered image to achieve one or more desired image rendering parameters, the method comprising:

- (a) determining default values of one or more image attributes of at least some portion of said digital image;

- (b) determining values of one or more digital-rendering-device rendering parameters;

- (c) identifying a plurality of groups of pixels that correspond to an image of a face within the digitally-rendered image, and determining corresponding image attributes to said groups of pixels;

- (d) comparing one or more default image attribute values with one or more rendered image attribute values based upon analysis of said image of said face; and

- (e) adjusting said digital-rendering-device rendering parameters corresponding to adjusting said image attribute values.

24. The one or more storage devices of claim 23, each of the steps being performed within a hard copy rendering device including a printer or a copier or a combination thereof.

25. The one or more storage devices of claim 23, each of the steps being performed within a soft copy rendering device including a digital display, television monitor, flat screen monitor, liquid crystal display, LED or OLED, or combinations thereof.
26. The one or more storage devices of claim 23, the one or more parameters including overall exposure, relative exposure, orientation, color balance, color gamut, white point, tone reproduction, size, or sharpness, or combinations thereof.
27. The one or more storage devices of claim 23, the face pixels identifying being automatically performed by an image processing apparatus, the method further comprising manually removing one or more of said plurality of groups of pixels that correspond to said image of said face.
28. The one or more storage devices of claim 27, the method of manually removing one or more detected faces being performed in response to false detection of one or more regions as one or more faces.
29. The one or more storage devices of claim 27, the method of manually removing one or more detected faces being performed in response to a determination to concentrate on less said image faces than faces identified in said identifying operation.
30. The one or more storage devices of claim 27, the method of manually removing one or more detected faces being performed by increasing a sensitivity level of said face identifying operation.
31. The one or more storage devices of claim 27, the method of manually removing one or more detected faces being performed by an interactive visual method.
32. The one or more storage devices of claim 27, the method being performed using an image rendering built-in display.

33. The one or more storage devices of claim 23, the face pixels identifying being automatically performed by an image processing apparatus, the method further comprising manually adding an indication of another face within the image.

34. The one or more storage devices of claim 23, the face pixels identifying being automatically performed by an image processing apparatus which receives a relative value as to a detection assurance.

35. The one or more storage devices of claim 23, the face pixels identifying being automatically performed by an image processing apparatus which receives a relative value as to an estimated importance of said detected regions.

36. The one or more storage devices of claim 35, the face pixels identifying being automatically performed by an image processing apparatus, the method further comprising manually modifying said relative value as to the estimated importance of said detected regions.

37. One or more processor readable storage devices having processor readable code embodied thereon, said processor readable code for programming one or more processors to perform a method of digital image processing using face detection to achieve one or more desired image rendering parameters, comprising the steps of:

- (a) identifying a group of pixels that correspond to an image of a face within a digitally-detected image;

- (b) determining initial values of one or more rendering parameters of at least some of the pixels;

- (c) determining one or more initial rendering parameters of the digitally-detected image based on the initial values; and

- (d) automatically adjusting values of the one or more rendering parameters of pixels within the digitally-detected image based upon comparison of the one or more initial rendering parameters with the one or more desired image rendering parameters.

38. The one or more storage devices of claim 37, the method being performed within a digital rendering device.

39. The one or more storage devices of claim 38, the one or more rendering parameters including overall exposure, relative exposure, orientation, color balance, color gamut, white point, tone reproduction, size, or sharpness, or combinations thereof.

40. The one or more storage devices of claim 38, the face pixels identifying being automatically performed by an image processing apparatus, the method further comprising manually removing a false indication of another face within the image.

41. The one or more storage devices of claim 38, the face pixels identifying being automatically performed by an image processing apparatus, the method further comprising manually adding an indication of another face within the image.

42. The one or more storage devices of claim 37, the one or more rendering parameters including overall exposure, relative exposure, orientation, color balance, color gamut, white point, tone reproduction, size, or sharpness, or combinations thereof.

43. The one or more storage devices of claim 37, the face pixels identifying step being automatically performed by an image processing apparatus, the method further comprising manually removing a false indication of another face within the image.

44. The one or more storage devices of claim 37, the face pixels identifying step being automatically performed by an image processing apparatus, the method further comprising manually adding an indication of another face within the image.